

# Notice of Allowability

Application No.

10/617,861

Examiner

John Kreck

Applicant(s)

TAKEUCHI ET AL.

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview 2/17/06.
2. ☒ The allowed claim(s) is/are 1,3-8 and 10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Randy Shay on 2/17/2006.

The application has been amended as follows:

In the specification:

Page 11, line 16 after "system. ";

"It is" has been changed to

---For the purposes of this invention, 'spent oil well' is defined as---

In the claims:

In claim 1:

Line 15 after "slurry";

"; and" has been deleted and replaced with a comma.

Line 16, after "well"

The period has been deleted and replaced with

--; and—

a new line is inserted at the end of the claim:

---5) subjecting said slurry to said microbes to produce gases. ---

Claims 11 and 12 have been canceled.

2. Claims 1, 3-8, and 10 are allowed.

The following is an examiner's statement of reasons for allowance: as summarized in the PTOL 413 dated 2/13/2006; examiner and applicant's representative agreed upon adding a limitation to the independent process claim, which requires the slurry to be subjected to the microbes to produce gases. Although similar processes are known: e.g. Menger, et al. (U.S. Patent number 4,845,034), which teaches mixing coal with microbes and subjecting the coal to the microbes underground to produce gases; and Hirbod (U.S. Patent number 4,273,615) and Hamilton (U.S. Patent number 3,724,542) each of which disclose processes of depositing waste slurry containing microbes to subject oil bearing formations underground to the microbial action. The prior art fails to disclose or suggest a process as called for in claim 1, including the depositing slurry in a empty spent oil well containing halophilic, thermophilic, and methanogenic microbes and subjecting the slurry to the microbes to produce gases. The "spent oil well" has been explicitly defined in the specification by the examiner's amendment, in order to provide clear indication that the term is used in a manner inconsistent with the usual meaning.

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3. Applicant is not required to separately record the substance of the interview, since the interview has put the application in condition for allowance.
4. Sprague, et al. (U.S. Patent number 2,504,462) and "the Petroleum Dictionary" page 369 are cited for providing support for the usual meaning for a well and a sealed oil well.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is 571-272-7042. The examiner can normally be reached on Mon-Thurs 530am-2pm; Fri: telework.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Kreck  
Primary Examiner  
Art Unit 3673

18 February 2006